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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

DODDS, HAROLD E

ART UNIT PAPER NUMBER

2168

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,894

Applicant(s)

TAMURA ET AL.

Examiner

Harold E. Dodds, Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1 December 2005 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "said file management unit" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1 and 35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 35 explicitly

states the use of a computer program. As such it does not qualify as a "machine".

Likewise, each of the four limitations of independent claim 1 appears to be a computer program, which when combined is also a computer program and not a "machine". If independent claim 1 stated the use of computer readable storage media or a similar limitation then the claim would become statutory.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-6, 14, 15, 8-12, 17-23, 25-29, 31, 32, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung et al. (U.S. Patent No. 6,105,148), Prust (U.S. Patent No. 6,714,968), and Subramanian et al. (U.S. Patent No. 6,574,631).

8. Chung renders obvious independent claims 1, 18, and 35 by the following:

“...an access executing unit which, when an access to a file occurs, processes said file in accordance with said access...” at col. 15, lines 10-12, col. 5, lines 32-34, col. 13, lines 65-67, and col. 14, lines 1-2.

“...a user defined process holding unit which holds a user defined process which has previously been defined by the user...” at col. 15, lines 10-12 and col. 5, lines 32-34.

“...and said user defined process held in said defined process holding unit...” at col. 5, lines 32-34 and col. 15, lines 10-12.

“...and a defined process executing unit which executes said user defined process...” at col. 15, lines 10-12.

“...by using the access to said file as a trigger...” at col. 5, lines 32-34 and col. 1, lines 50-56.

Chung does not teach the managing of files, the use of meta data, and the use of formats.

9. However Prust teaches the managing of files, the use of meta data, and the use of formats as follows:

“...a managing unit which manages said file with two areas including said data area and a meta data area...” at col. 5, lines 16-20 and col. 5, lines 2-3.

“...correlating the file managed in said data area...” at col. 5, lines 2-3 and col. 5, lines 16-20.

“...of said file managing unit...” at col. 5, lines 16-20.

It would have been obvious to one of ordinary skill at the time of the invention to combine Prust with Chung to provide a file management system in order to use standard technology for managing files and gain acceptance of the system. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Prust with Chung to use meta data in order to provide information about the structure of data being used. Finally, it would have been obvious to one of ordinary skill at the time of the invention to combine Prust with Chung to use formats for data in order to use standard structures of the data and gain acceptance of the system. Chung and Prust teach the use of related systems. They teach the use of computers, the use of networks, the use of data areas, the access of files, the use of processes, and the use of applications. Chung provides file access, user-defined processes, and triggers and Prust provides file management systems, meta data, and data formats.

Prust does not explicitly teach the use of extended meta data.

10. However Subramanian teaches the use of extended meta data as follows: "...and provides an extended meta data area in said meta data area to store extended meta data..." at col. 8, lines 61-66.

"...correlated by the extended meta data..." at col. 8, lines 61-66.

It would have been obvious to one of ordinary skill at the time of the invention to combine Subramanian with Chung and Prust to provide extended meta data in order to improve the performance of meta data and gain acceptance of the system. Chung, Prust, and Subramanian teach the use of related systems. They teach the use of computers, the use of networks, the use of data areas, the access of information, the

use of processes, and the use of applications, Chung and Subramanian teach the use of tables, the use of columns, and the use of rows, and Prust and Subramanian teach the use of databases and the use of formats. Chung provides file access, user-defined processes, and triggers, Prust provides file management systems, meta data, and data formats, and Subramanian provides extended meta data. In independent claims 1, 18, and 35, the term "associates" is used to suggest the term "correlates".

11. As per claims 2 and 19, the "...and said file managing unit...", is taught by Prust at col. 5, lines 16-20, the "...enables the user to designate...", is taught by Chung at col. 15, lines 10-12, and the "...format of said extended meta data area...", is taught by Subramanian at col. 6, lines 9-15 and col. 8, lines 61-66.

12. As per claims 3 and 20, the "...said file managing unit...", is taught by Prust at col. 5, lines 16-20, the "...designates the format of said extended meta data area...", is taught by Subramanian at col. 6, lines 9-15 and col. 8, lines 61-66, and the "...in accordance with contents in said data area...", is taught by Subramanian at col. 9, lines 33-37 and col. 8, lines 61-66.

13. As per claims 4 and 21, the "...said file managing unit sets meta data..." Is taught by Prust at col. 5, lines 16-20, col. 4, lines 59-61, and col. 5, lines 2-3, the "...file type...", is taught by Prust at col. 6, lines 63-65, the "...as a format of said extended meta data area...", is taught by Subramanian at col. 6, lines 9-15 and col. 8, lines 61-66,

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the "...and determines the format of said extended meta data area...", is taught by is taught by Subramanian at col. 6, lines 9-15 and col. 8, lines 61-66, and the "...in accordance with said file type...", is taught by Prust at col. 6, lines 63-65.

14. As per claims 5 and 22, the "...said file managing unit...", is taught by Prust at col. 5, lines 16-20, the "...determines the file type upon creation of the file...", is taught by Prust at col. 6, lines 63-65 and col. 7, lines 2-7, the "...sets the extended meta data area...", is taught by Subramanian at col. 1, lines 21-24 and col. 8, lines 61-66, the "...in accordance with said file type...", is taught by Prust at col. 6, lines 63-65, the "...enables the user to change...", is taught by Subramanian at col. 2, lines 40-43, the "...said file type...", is taught by Prust at col. 6, lines 63-65, and the "...and change said extended meta data area...", is taught by Subramanian at col. 2, lines 40-43 and col. 8, lines 61-66.

In claims 5 and 22, the term "organize" is used to suggest the term "set".

15. As per claims 6 and 23, the "...said file managing unit ...", is taught by Prust at col. 5, lines 16-20, the "...automatically determines the file type...", is taught by Prust at col. 4, lines 59-63 and col. 6, lines 63-65, the "...from the contents in the data area of said file...", is taught by Chung at col. 12, lines 9-13 and col. 5, lines 52-58,

the "...and also automatically determines..." is taught by Chung at col. 15, lines 8, lines 50-53 and col. 6, lines 18-21,
and the "...said extended meta data area..." is taught by Subramanian at col. 8, lines 61-66.

16. As per claims 8 and 25, the "...said file managing unit..." is taught by Prust at col. 5, lines 16-20,
the "...holds information extracted from said data area..." is taught by Prust at col. 7, lines 15-17 and col. 5, lines 61-66,
and the "...as extended meta data into said extended meta data area..." is taught by Prust at col. 7, lines 15-17 and col. 5, lines 61-66.

17. As per claims 9 and 26, the "...said extended meta data..." is taught by Subramanian at col. 8, lines 61-66,
the "...extracted from said data area..." is taught by Prust at col. 7, lines 15-17 and col. 5, lines 61-66,
the "...is duplicated and held in said data area..." is taught by Prust at col. 4, lines 19-21,
and the "...and said extended meta data area..." is taught by Subramanian at col. 8, lines 61-66.

In claims 9 and 26, the terms "copy" and "store" are used to represent the terms "duplicated" and "held".

18. As per claims 10 and 27, the "...in said extended meta data..." is taught by Subramanian at col. 8, lines 61-66,

the "...extracted from said data area...", is taught by Prust at col. 7, lines 15-17 and col. 5, lines 61-66,
the "...substance is held in said data area...", is taught by Chung at col. 10, lines 13-17, col. 7, lines 66-67, col. 8, lines 1-7, and col. 5, lines 52-28,
the "...and a pointer to the substance in said data area...", is taught by Chung at col. 17, lines 38-41, col. 10, lines 13-17, and col. 5, lines 52-28,
and the "...is held in said extended meta data area...", is taught by Subramanian at col. 8, lines 61-66.

In claims 10 and 27, the term "element" is used to represent the term "substance".

19. As per claims 11 and 28, the "...upon writing into the data area of said file...", is taught by Chung at col. 18, lines 24-26, col. 5, lines 52-58, and col. 5, lines 32-34,
the "...said defined process executing unit changes...", is taught by Chung at col. 15, lines 10-12 and col. 17, lines 10-12,
the "...extended meta data in said meta data area...", is taught by Subramanian at col. 8, lines 61-66,
and the "...on the basis of said user defined process...", is taught by Chung at col. 15, lines 10-12.

20. As per claims 12 and 29, the "...upon writing into the data area of said file...", is taught by Chung at col. 18, lines 24-26, col. 5, lines 52-58, and col. 5, lines 32-34,

the "...said defined process executing unit...", is taught by Chung at col. 15, lines 10-12, the "...sends a message to a user program which is additionally provided...", is taught by Chung at col. 6, lines 23-29 and col. 15, lines 10-12, the "...and changes...", is taught by Chung at col. 17, lines 10-12, and the "...extended meta data in said extended meta data area...", is taught by Subramanian at col. 8, lines 61-66.

21. As per claims 14 and 31, the "...said defined process executing unit executes the user defined process...", is taught by Chung at col. 15, lines 10-12 and the "...in accordance with said file type...", is taught by Prust at col. 6, lines 63-65.

22. As per claims 15 and 32, the "...having an API...", is taught by Prust at col. 6, lines 3-13 and the "...for allowing the user to define a process...", is taught by Chung at col. 15, lines 10-12.

23. As per claims 17 and 34, the "...wherein a size of said extended meta data area...", is taught by Subramanian at col. 8, lines 61-66 and the "...is variable in accordance with the file contents...", is taught by Chung at col. 17, lines 10-12 and col. 12, lines 9-13.

In claims 17 and 34, the term "area" is used to represent the term "size".

24. Claims 7 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung, Prust, and Subramanian as applied to claims 5 and 22 above, and further in view of King et al. (U.S. Patent No. 5,537,592).

As per claims 7 and 24, the "...said file managing unit...", is taught by Prust at col. 5, lines 16-20,
the "...for managing a plurality of files...", is taught by Prust at col. 5, lines 16-20,
the "...and the file type...", is taught by Prust at col. 6, lines 63-65,
the "...which is set upon creation of the file...", is taught by Prust at col. 6, lines 63-65
and col. 7, lines 2-7,
but the "...has a tree structure using a directory...", is taught by King at col. 8, lines 4-11,
and the "...succeeds a file type of a parent directory...", are not taught by either Chung, Prust, or Subramanian.

However, King teaches the use of tree structures, the use of directories, and the use of parent directories as follows:

"...If the hierarchical directory tree structure of FIG. 5 is encountered and a complete disk copy is specified, the present invention will produce a two dimensional list 108 with pointers as illustrated in FIG. 6 which designed to maintain the hierarchical directory structure of the source and with the pointers of FIG. 7 which are used to maintain directory build order when, for example, a VMS disk is the destination disk 122..." at col. 8, lines 4-11.

"...If the new node is a file node 1226, then a determination 1228 is made as to whether this is the first file in the parent directory, if so, the parent file pointer is set 1230 to the new node, and if not, the file is added 1232 to the end of the file list..." at col. 25, lines 53-57.

It would have been obvious to one of ordinary skill at the time of the invention to combine King with Chung, Prust, and Subramanian to use hierarchical directory tree in order to provide quicker search of the directories and gain acceptance of the system.

The root node of a hierarchical directory tree is known as a parent directory. Chung, Prust, Subramanian, and King teach the use of related systems. They teach the use of computers, the use of networks, the access of information, the use of processes, and the use of applications and Prust, Subramanian, and King teach the use of formats and Chung, Subramanian, and King teach the use of tables. Chung provides file access, user-defined processes, and triggers, Prust provides file management systems, meta data, and data formats, Subramanian provides extended meta data, and King provides hierarchical directory trees and parent directories.

25. Claims 13 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung, Prust, and Subramanian as applied to claims 2 and 19 above respectively, and further in view of Cole et al. (U.S. Patent No. 6,564,232).

As per claims 13 and 30, the "...upon writing into the data area of said file...", is taught by Chung at col. 18, lines 24-26, col. 5, lines 52-58, and col. 5, lines 32-34, the "...said defined process executing unit...", is taught by Chung at col. 15, lines 10-12, the "...and changes extended meta data extended in said extended meta data area...", is taught by Subramanian at col. 2, lines 40-43 and col. 8, lines 61-66, the "...by using the fact, as a trigger...", is taught by Chung at col. 1, lines 50-56, the "...by a user program which is additionally provided...", is taught by Chung at col. 15, lines 10-12, but the "...sets a data area a change flag to a high level...", and the "...that said flag has been set to the high level...", is not taught by either Chung, Prust, or Subramanian.

However. Cole teaches the setting of change flags as follows:

"...The server sets the profile property to the indicated value from the list (step 404) and then sets the property's change flag (step 406)..." at col. 5, lines 43-46.

It would have been obvious to one of ordinary skill at the time of the invention to combine Cole with Chung, Prust, and Subramanian to set change flags in order to identify each change with a flag and then proceed with a next step in the processing that handles multiple changes as one time. Chung, Prust, Subramanian, and Cole teach the use of related systems. They teach the use of computers, the use of networks, the use of processes, and the use of applications, Chung, Subramanian, and Cole teach the use of files, and Prust, Subramanian, and Cole teach the use of databases and the use of formats. Chung provides file access, user-defined processes, and triggers, Prust provides file management systems, meta data, and data formats, Subramanian provides extended meta data, and Cole sets change flags.

26. Claims 16 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung, Prust, and Subramanian as applied to claims 15 and 32 above respectively, and further in view of Tamer et al. (U.S. Patent No. 6,542,909) and Moriyama (U.S. Patent No. 6,356,904).

As per claims 13 and 33, the "...wherein said API...", is taught by Prust at col. 6, lines 3-13,
the "...comprising an API...", is taught by Prust at col. 6, lines 3-13,
the "...and an API...", is taught by Prust at col. 6, lines 3-13,
but the "...has a double layer structure...",

the "...which is executed in a user area..."

and the "...which is executed in a kernel area..." is not taught by either Chung, Prust, or Subramanian.

However, Tamer teaches the use of multiple layers and the use of user areas as follows:

"...It should be appreciated that if additional mapping layers (e.g., LVM 224) were employed, the actual physical location of the data would be determined by using the information provided by the file system metadata as an index into mapping information (metadata or an equivalent data structure) for the next lowest mapping layer, and that the process would repeat until reaching the lowest mapping layer..." at col. 5, lines 28-35.

"...In FIG. 3A, the user data 310 represents that area of memory where user data corresponding to files is stored, and the free space 330 represents blocks of user data that are currently unused..." at col. 4, lines 20-23.

It would have been obvious to one of ordinary skill at the time of the invention to combine Tamer with Chung, Prust, and Subramanian to use multiple layers of structure in order to separate the physical locations of sets of data and application programs. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Tamer with Chung, Prust, and Subramanian to have a user area in order to have areas of computer memory dedicated to the execution of application programs separate from areas dedicated to other application programs. Chung, Prust, Subramanian, and Tamer teach the use of related systems. They teach the use of computers, the use of data areas, the use of processes, and the use of applications, Chung, Prust, and Tamer teach the use of files, and Prust, Subramanian, and Tamer teach the use of databases, the use of formats, and the use of meta data. Chung

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provides file access, user-defined processes, and triggers, Prust provides file management systems, meta data, and data formats, Subramanian provides extended meta data, and Tamer provides the use of multiple layers and user areas.

Tamer does not teach the use of kernel areas.

However, Moriyama teaches the use of kernel areas as follows:

"...This operating system has a micro-kernel, as shown in FIG. 3, that provides the basic function as the operating system, thereby making it possible to simultaneously provide a plurality of program execution environments on the micro-kernal..." at col. 6, lines 10-14.

It would have been obvious to one of ordinary skill at the time of the invention to combine Moriyama with Chung, Prust, Subramanian, and Tamer to use a kernel area in order to provide the basic operations of an operating system separate from the user areas. Chung, Prust, Subramanian, Tamer, and Moriyama teach the use of related systems. They teach the use of computers, the use of data areas, the access to data, the use of processes, and the use of applications and Chung, Prust, Subramanian, and Moriyama teach the use of networks. Chung provides file access, user-defined processes, and triggers, Prust provides file management systems, meta data, and data formats, Subramanian provides extended meta data, Tamer provides the use of multiple layers and user areas, and Moriyama provides a kernel area.

27. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gartner (U.S. Patent No. 6,393,435) and Katada et al. (U.S. Patent No. 5,619,691).

28. Gartner renders obvious independent claim 36 by the following:

"...storing, as meta data in a file..." at col. 4, line 67 and col. 5, lines 1-2.

"...a relation between a characteristic of the file and a computer program..." at col. 9, lines 50-54 and col. 6, lines 57-60.

"...and in response to a file access..." at col. 7, lines 7-10 and col. 4, lines 8-11.

Gartner does not specifically teach the executing of computer programs.

29. However, Katada teaches the executing of computer programs as follows:
"...executing the computer program based on the relation..." at col. 4, lines 44-55.

It would have been obvious to one of ordinary skill at the time of the invention to combine Katada with Gartner to provide execution of programs in order to use standard technology running applications on computers and gain acceptance of the system. Gartner and Katada teach the use of related systems. They teach the use of computers, the use of file access, the use of computer programs, the use of characteristics, and the use of relationships. Gartner provides storing meta data, relationships between characteristics, and computer programs and Katada executes computer programs.

30. As per claim 37, the "...execution of the computer program..." is taught by Katada at col. 4, lines 44-46
and the "...is also based on the type of file access..." is taught by Gartner at col. 7, lines 13-18 and col. 4, lines 8-11.

31. As per claim 38, the "...setting the meta data using an application program interface..." is taught by Gartner at col. 7, lines 21-24, col. 4, line 67 and col. 5, lines 1-7
and the "...associated with a file system..." is taught by Gartner at col. 4, lines 60-62.

Response to Arguments

32. Applicants' arguments filed 18 April 2005 have been fully considered but they are not persuasive. In the first argument for independent claim 1 on page 8, paragraphs 4 and 5 and page 9, paragraph 1, the Applicants state:

"The rejection is improper at least because Chung in view of Suzuki does not teach or suggest all the claim limitations. Claim 1 recites meta data "correlating the file managed in said data area and said user defined process held in said defined process holding unit." Neither Chung nor Suzuki, when viewed individually or in combination, teach or suggest this feature. On page 3, lines 9 and 10, of the Office Action, the Examiner acknowledged that Chung does not teach this feature.

As discussed at the Examiner Interview, in Suzuki, the term "meta data" describes the data referred to as "UW data" (see col. 14, lines 20-22). This "UW data" is data stored in a "UW data area" of a disk. As explained by column 14, lines 23-25, this UW data is hardware level information about a disk. For example, a number of times a disk has been used is stored as "UW data" (col. 14, 23-25). See also the definition of UW data as "data representing the number of times the disc has been used by the information processing apparatus and also error information data" (column 11, lines 51-53). Further, this UW data cannot be accessed by the file system and is stored in an area that is not formatted by a drive format command (column 8, lines 46-58).

As the meta data of Suzuki includes only low level information about hardware, it does not correspond to data "correlating the file managed in said data area and said user defined process held in said defined process holding unit." Therefore, Suzuki does not teach or suggest anything comparable to the feature the Examiner acknowledges Chung does not teach. As neither Chung nor Suzuki teaches anything comparable to this feature, Chung in view of Suzuki does not disclose meta data "correlating the file managed in said data area and said user defined process held in said defined process holding unit."

The Examiner disagrees. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. The Suzuki reference has been replaced by the Prust and Subramanian references. The limitation "correlating the file managed in said data area and said user defined process held in said defined process holding unit" is taught by a combination of Chung and Prust references. Prust teaches "correlating the file managed in said data area" at col. 5, lines 2-3 and col. 5,

lines 16-20 and Chung teaches "and said user defined process held in said defined process holding unit" at col. 5, lines 32-34 and col. 15, lines 10-12.

33. In the second argument for independent claims 18 and 35 and dependent claims 2, 3, 8-12, 17, 19, 20, 25-29, and 34 on page 9, paragraph 2, the Applicants state:

"Claims 18 and 35 include features similar to the feature of claim 1 discussed above. Therefore, Chung in view of Suzuki does not render these claims unpatentable for reasons similar to the reasons discussed above. Claims 2, 3, 8-12, 17, 19, 20, 25-29, and 34 are allowable over Chung in view of Suzuki, at least because these claims depend upon an allowable claim."

The Examiner disagrees. Since the response to the first argument has shown that a combination of prior art from Chung, Prust, and Subramanian render obvious independent claim 1, independent claims 18 and 35 include features similar to the feature of claim 1, and no additional arguments have been made for either independent claim then independent claims 18 and 35 are still rendered obvious. Likewise, since a combination of prior art from Chung, Prust, and Subramanian render obvious independent claims 1 and 18, claims 2, 3, 8-12, and 17 depend on independent claim 1, claims 19, 20, 25-29, and 34 depend on independent claim 18, and no additional arguments have been provided for any of these dependent claims then claims 2, 3, 8-12, 17, 19, 20, 25-29, and 34 are still rendered obvious.

34. In the third argument for independent claims 1, 18, and 35 on page 9, paragraphs 3-5 and page 10, paragraph 1, the Applicants state:

"The Examiner asserted that one of ordinary skill in the art would apply the teachings of Suzuki to the system of Chung "to use standard technology for managing files" (Office

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Action, page 4, lines 2-3). The Examiner also asserted that it would be obvious to combine the references "to provide information about the structure of data being used" (page 4, line 6) and "to use formats for data in order to use standard structures of the data and gain acceptance of the system" (page 4, lines 8-9)

As previously explained, the meta data of Suzuki is inaccessible by calls from a computer's file system and is stored on a portion of a disk that is not formatted using file system drive format commands. In contrast to Suzuki, Chung teaches storing and accessing files within a file system (see Fig. 1). For example, see the section of Chung entitled "Monitoring Persistent state by intercepting file system calls."

As Suzuki teaches meta data that is independent and separate from a file system, the Examiner's assertions appear to be incorrect. Contrary to the Examiner's assertions, applying the teachings of Suzuki to Chung would not allow the use of "standard technology for managing files," "provide information about the structure of data being used," or allow the use of "formats for data in order to use standard structures ...". Instead, applying Suzuki to Chung would render both Chung and Suzuki would only provide an area on a disc for storing the number of accesses and error information and would not advance the stated purpose of Chung. Additionally, by teaching storage of UW data that is completely separate from a file system, Suzuki appears to teach away from the system of Chung.

The Examiner disagrees. Applicant's arguments with respect to claims 1, 15, and 29 have been considered but are moot in view of the new ground(s) of rejection. The

Suzuki reference has been replaced by the Prust and Subramanian references. Prust used a meta data database which is accessed by standard file management. Prust states:

"...Metadata database 222 stores metadata associated with the data files by the user..." at col. 5, lines 2-3.

Subramanian also uses standard database technology.

35. In the fourth argument for claims 4-7, 13-16, 21-24, and 30-33 on page 10, paragraphs 2 and 3, the Applicants state:

The Examiner rejected claims 4-7, 14, 21-24, and 31 under 35 U.S.C. § 103(a) as unpatentable over Chung in view of Suzuki and further in view of U.S. Patent No. 5,537,592 ("King"). Additionally, the Examiner rejected claims 13 and 30 as unpatentable over Chung in view of Suzuki and further in view of U.S. Patent No. 6,105,148 ("Cole"). The Examiner also rejected claims 15 and 32 as unpatentable over

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Chung in view of Suzuki and further in view of U.S. Patent No. 6,542,909 ("Tamer") and rejected claims 16 and 33 as unpatentable over Chung in view of Suzuki and further in view of U.S. Patent No. 6,356,904 ("Moriyama").

These rejection are respectfully traversed. Nothing has been cited or found in any of King, Cole, Tamer, or Moriyama that suggests modifying Chung in view of Suzuki to overcome the deficiencies discussed above.

The Examiner disagrees. The responses to the first three arguments have shown that a combination of prior art from Chung, Prust, and Subramanian render obvious independent claims 1 and 18 and there is no additional requirement that either King, Cole, Tamer, or Moriyama are required to render obvious these independent claims. Since the responses to the first three arguments have rendered obvious independent claims 1 and 18, claims 4-7 and 14 depend on independent claim 1, claims 21-24 and 31 depend on independent claim 18, and no additional arguments have been provided for any of these dependent claims then claims 4-7, 14, 21-24, and 31 are still rendered obvious.

36. In the fifth argument for claims 36-38 on page 10, paragraph 4, the Applicants state:

"This Reply adds claims 36-38. These claims are patentable at least because the prior art does not teach or suggest all the elements set forth in them. As discussed above, the teachings of Suzuki regarding "UW data" stored in a "UW data area" contains no suggestion of "a relation between a characteristic of the file and a computer program" (claim 36, lines 2-3) or "executing the computer program based on the relation" (claim 36, last line)."

The Examiner disagrees. Since these are new claims a new search for prior art has been performed. Independent claim 36 and dependent claims 37 and

38 have been rendered obvious by a combination of prior art from Gartner and Katada.

Conclusion

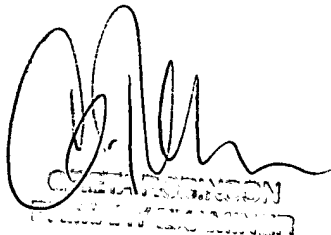
37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (571)-272-4110. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harold E. Dodds, Jr.

Harold E. Dodds, Jr.
Patent Examiner
February 8, 2006



Harold E. Dodds, Jr.
Patent Examiner
February 8, 2006